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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)
	)
Kar Yan Tam et al.	) Group Art Unit: 2132
	)
Application No.: 09/965,831	) Examiner: BENJAMIN E LANIER
	)
Filed: October 1, 2001	) Appeal No.: _____
	)
For: METHODS FOR EMBEDDING	)
DATA IN DIGITAL AUDIO DATA	)
	)
	)
	)

SUPPLEMENTAL APPEAL BRIEF

Mail Stop APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This supplemental appeal brief is in response to a Notice of Noncompliant

Appeal Brief dated October 19, 2007, and includes a revised Summary of Claimed

Subject Matter section.

The Commissioner is hereby authorized to charge any appropriate fees under

37 C.F.R. §§1.17 and 4.20 that may be required by this paper, and to credit any

overpayment, to Deposit Account No. 02-4800.

V.   Summary of Claimed Subject Matter

The instant application is directed to a method and apparatus in which an audio signal is watermarked (page 9, lines 9-14). The watermarked audio signal is split into at least two separate sections where the watermark information is spread over both sections (page 11, lines 6-17). The watermark includes copyright information used for copyright control such as parameters that stipulate whether the audio signal may be copied and the number of times played under the user's license (page 9, lines 12-15). The first section of the watermark signal is distorted so that it may not be played without the use of a key, which is embedded in the second section of the audio signal (page. 11, lines 6-17). Because the watermark signal is spread over all sections of the audio signal, including the portion holding the key, any attempt to alter the watermark will destroy the embedded key so that the first section of the audio signal can no longer be recovered and played without distortion (page 13, lines 16-21). As a result, the embedded key indirectly protects the watermark. In addition, because the key is embedded in the audio content of the second section of the audio signal, the second section cannot be removed because doing so would corrupt the key for unlocking the first section (paragraph beginning a page 11, line 18). As a result, the first section could not be played without distortion.

The table, which follows, maps Appellant's independent claims to those portions of the disclosure that support the recited feature.

Claim #	Claim element	Support
Claim 1	A method of embedding watermarking data in an audio signal, comprising the steps of: (a) incorporating watermarking information into said audio signal, to form a watermarked audio signal	pg. 8, lines 12-15; pg. 9, lines 9-15

Claim #	Claim element	Support
	(b) sectioning said watermarked audio signal into at least two sections each section having audio content,	pg. 9, lines 16-18
	(c) marking at least one of said sections whereby said sections may be identified,	pg. 9, lines 16-18
	(d) generating distortion in a first one of said sections of said signal in a manner recoverable by a key obtainable from at least one other section having audio content,	pg. 10, lines 3-9
	(e) appending said distorted section to said at least one other section to form a composite signal comprising a distorted section and at least one undistorted section.	pg. 10, lines 9-10
Claim 18	A watermarked audio signal stored in a memory or a computer readable medium comprising at least two sections each having audio content, including a first section which is distorted in a manner recoverable by means of a key obtainable from audio content in at least one other section.	pg. 9, lines 9-18 pg. 10, lines 3-9
Claim 23	An apparatus for embedding watermarking data in an audio signal, comprising: (a) means for incorporating watermarking information into said audio signal to form a watermarked audio signal,	pgph bridging lines 10-11; means includes device configured through programming code to execute a robust watermarking function
	(b) means for sectioning said watermarked audio signal into at least two sections each having audio content,	pg. 9, lines 9-18; pg. 10, line 13 - pg. 1, line 5; means includes device configured through programming code to execute a watermarking function
	(c) means for marking at least one of said sections whereby said sections may be identified,	pg. 11, lines 6-17; means includes device configured through programming code to execute a robust watermarking with section information
	(d) means for generating distortion in one of said sections of said signal in a manner recoverable by a key obtainable from at least one	pgph bridging pages 11 and 12; means includes device configured

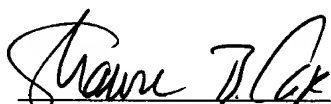| Claim #	Claim element	Support
	other section having audio content, and	through programming code to execute a pseudo-random number generator function
	(e) means for appending said distorted section to said at least one other section to form a composite signal comprising a distorted section and at least one undistorted section.	pg. 10, lines 9-10
Claim 25	A method for including an advertisement with audio data in an audio signal comprising, providing or creating an audio signal comprising a first section having audio content and an advertisement section having audio content,	pg. 9, lines 9-12
	generating distortion of said first section in a manner recoverable by a key obtainable from said advertisement section,	pg. 10, lines 3-8; pgph bridging pages 11 and 12
	appending said distorted first section to said advertisement section wherein said key is obtainable from said audio content in said advertisement section.	pg. 10, lines 9-10; pg. 12, lines 9-11
Claim 26	A method for including a trial listening section with audio data in an audio signal comprising, sectioning said signal into a first section and a trial listening section	pg. 9, lines 9-21
	generating distortion of said first section in a manner recoverable by a key obtainable from said trial listening section,	pg. 10, lines 3-9; pgph bridging pages 11 and 12
	appending said distorted first section to said trial listening section, wherein the key is obtainable from said advertisement audio content in said section.	pg. 10, lines 9-10; pg. 12, lines 9-11
Claim 27	A method for including an advertisement section and a trial listening section with audio data in an audio signal, including sectioning said signal into a first section, an advertisement section, and a trial listening section, marking at least one of said sections whereby said sections may be identified,	pgph bridging pages 9 and 10
	generating distortion in said first section in a manner recoverable by a key obtainable from at least one of said advertisement and trial listening sections, and	pg. 10, lines 3-9; pgph bridging pages 11 and 12
	appending said distorted first section to said advertisement and trial listening sections to	pg. 10, lines 9-10; pg. 12, lines 9-11

Claim #	Claim element	Support
	form a composite signal,	
	wherein said key is obtainable from said audio content in said advertisement section.	pg. 8, lines 3-5; pg. 10, lines 5-9
Claim 28	A method of restricting access to a part of a media signal, comprising the steps of: (a) sectioning said signal into at least two sections each having media content,	pg. 9, lines 9-18
	(b) marking at least one of said sections whereby said sections may be identified,	pg. 9, lines 16-19; pg. 11, lines 6-17
	(c) generating distortion in one of said sections of said signal in a manner recoverable by a key obtainable from or more sections having media content, wherein said key is, obtainable from said media content in said one or more other sections, and	pg. 10, lines 3-9; pgph bridging pages 11 and 12
	(d) appending said distorted section to said one or more other sections to form a composite signal comprising a distorted section and at least one undistorted section.	pg. 10, lines 9-10; pg. 12, lines 9-11
Claim 29	A method of embedding watermarking data in a media content signal, comprising the steps of: (a) incorporating watermarking information into said media content signal using a robust watermarking technique to form a watermarked media content signal,	pg. 8, lines 12-17; pg. 9, lines 4-8
	(b) generating distortion in at least a part of said watermarked media content signal in a manner recoverable by a key, and	pg. 10, lines 3-10; pgph bridging pages 11 and 12
	(c) embedding said key in at least a part of said watermarked media content signal using a fragile data hiding technique, whereby if said watermarking information is corrupted, altered or removed said embedded key is rendered unobtainable from said media content signal.	pgph bridging pages 8 and 9
Claim 33	A watermarked media content signal stored in a memory or on a computer readable medium, comprising: (a) a robust watermark layer comprising watermark information,	pg. 8, lines 12-17
	(b) a fragile quality control information layer comprising a key, and	pgph bridging pages 8 and 9

Claim #	Claim element	Support
	(c) a media content layer having one or more sections comprising media content, said section or at least one of said sections if there is more than one section, being distorted in a manner recoverable by use of said key in the fragile quality control information layer;	pg. 7, lines 15-17; pg. 8, lines 2-11; pgph bridging pages 8-9
	whereby if said robust watermark layer is altered, deleted or corrupted the fragile quality control information layer is rendered unreadable such that said key cannot be obtained from it.	pg. 9, lines 4-8

Based on the statements provided herein and the errors in the rejection of the

claims pointed to in the Appeal Brief filed on October 1, 2007, Appellant respectfully

requests that the final rejection be reversed and the application be returned to the

Examiner for prompt allowance.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date   October 29, 2007   By: _____

Shawn B. Cage
Registration No. 51522

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620